Serial No.: N/A

Art Unit N/A

Preliminary Amendment prior to Examination

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.(Currently Amended) Process for the preparation of a 2-(n-alkyl)-3-(4-hydroxybenzoyl)benzofuran of formula (I)

in which R represents a linear or branched alkyl radical including from 1 to 5 carbon atoms and R1 represents a linear or branched alkyl radical including from 1 to 3 carbon atoms, a linear or branched alkoxy radical including from 1 to 3 carbon atoms, a halogen atom or a nitro radical, in which

a) a 2-alkyl-3-carboxybenzofuran of formula (II)

in which R and R1 have the meanings already indicated, is reacted with a halogenating agent to produce the compound of formula (III)

Serial No.: N/A

Art Unit N/A

Preliminary Amendment prior to Examination

$$R1$$
 $R1$
 $R1$
 $R1$
 $R1$
 $R1$
 $R1$

in which X represents a halogen atom and R and R1 have the meanings already indicated,

b) then the compound of formula (III) is reacted with an alkyl phenyl ether of formula

in which R2 represents a linear or branched alkoxy radical including from 1 to 5 carbon atoms,

in the presence of a Lewis acid, to produce a mixture of 2-alkyl-3-(4-alkoxybenzoyl)benzofuran of formula (IV) and of 2-alkyl-3-(2-alkoxybenzoyl)benzofuran of formula (IVa)

$$R1$$
 $R2$
 (IV)

Serial No.: N/A

Art Unit N/A
Preliminary Amendment prior to Examination

in which R, R1 and R2 have the meanings already indicated,

- c) and the mixture is subjected to a dealkylation reaction to produce the product of formula (I), which is isolated, if desired.
- 2.(Currently Amended) Process according to Claim 1, characterized in that the halogenating agent is chosen selected from the group consisting of phosphorus trichloride PCl₃, phosphorus pentachloride PCl₅, phosphorus oxychloride POCl₃, oxalyl chloride (COCl)₂, phosgene COCl₂ and thionyl chloride SOCl₂.
- 3.(Currently Amended) The process Process according to Claim 1 [[or 2]],

 wherein a molar ratio of characterized in that the amount of halogenating agent

 employed is such that the halogenating agent/compound of formula (II) molar

 ratio has a value ranges from 1 to 5.
- 4.(Currently Amended) Process The process of claim 1, wherein according to one of Claims 1 to 3, characterized in that the alkyl phenyl ether is anisole.
- 5.(Currently Amended) The process of claim 1, wherein Process according to one of Claims 1 to 4, characterized in that the reaction of the compound of formula (II) with the halogenating agent is carried out in the presence of an organic solvent chosen from selected from the group consisting of halogenated

Serial No.: N/A

Art Unit N/A
Preliminary Amendment prior to Examination

aliphatic hydrocarbons, [[and/or]] aromatic hydrocarbons, [[and]] alkyl phenyl ethers, and mixtures thereof.

- 6.(Currently Amended) The process of claim 1, wherein Process according to either of Claims 4 and 5, characterized in that the reaction of the compound of formula (II) with the halogenating agent is carried out in the presence of an organic solvent which is anisole.
- 7.(Currently Amended) The process of claim 1, wherein Process according to one of Claims 1 to 6, characterized in that the amount of alkyl phenyl ether employed is such that the a molar ratio of alkyl phenyl ether/compound of formula (III) molar ratio is ranges from 1 to 10.
- The process of claim 1, wherein Process according to 8.(Currently Amended) one of Claims 1 to 7, characterized in that the temperature of the reaction between the compound of formula (III) and the alkyl phenyl ether takes place at a temperature [[is]] between -5°C and ambient temperature.
- The process of claim 1, wherein Process according to 9.(Currently Amended) one of Claims 1 to 8, characterized in that the reaction between the compound of formula (III) and the alkyl phenyl ether is carried out in the presence of an organic solvent which is a halogenated aliphatic <u>hydrocarbon</u>, [[and/or]] <u>or an</u> aromatic hydrocarbon or an alkyl phenyl ether, or a mixture thereof.

Serial No.: N/A

Art Unit N/A
Preliminary Amendment prior to Examination

The process of claim 1, wherein Process according to 10.(Currently Amended) one of Claims 1 to 9, characterized in that the Lewis acid used in the reaction between the compound of formula (III) and the alkyl phenyl ether is selected from the group consisting of an aluminium halide, a boron halide, a titanium halide, a tin halide, a bismuth halide, and an iron halide or aluminium chloride, preferably aluminium chloride.

- 11.(Currently Amended) The process of claim 1, wherein Process according to one of Claims 1 to 10, characterized in that the amount of Lewis acid is such that the a molar ratio of Lewis acid/compound of formula (III) molar ratio [[is]] ranges from 1 to 10.
- 12.(Currently Amended) The process of claim 1, wherein Process according to one of Claims 1 to 11, characterized in that the dealkylation reaction c) is carried out under hot conditions a heating temperature of from 40 to 100 °C in the presence of a Lewis acid.
- 13.(Currently Amended) The process of claim 1, wherein Process according to Claim 12, characterized in that the Lewis acid used in the alkylation dealkylation reaction is carried out in the presence of a Lewis acid selected from the group consisting of an aluminium halide, a boron halide, a titanium halide, a tin halide, a bismuth halide, and an iron halide or aluminium chloride.

Preliminary Amendment prior to Examination

14.(Currently Amended) The process of claim 1, wherein Process according to one of Claims 1 to 13, characterized in that the amount of Lewis acid employed in the dealkylation reaction a molar ratio of stage is such that the Lewis acid/compound of formula (IV) and (IVa) molar ratio is ranges from 1 to 10.

- 15.(Currently Amended) The process of claim 12, wherein Process according to one of Claims 12 to 14, characterized in that the heating temperature in the dealkylation stage is from 40°C to 100 50°C to 65°C.
- 16.(Currently Amended) A compound of formula (V)

in which R3 represents a hydroxyl radical or represents a halogen atom has the meaning of X already indicated in Claim 1,

R4 represents a linear or branched alkyl radical including from 2 to 5 carbon atoms and R'₁ represents a nitro radical.

17.(Original) [[A]] <u>The</u> compound according to Claim 16, characterized in that R'₁ represents a nitro radical in the 5 position and R4 represents an n-butyl radical.

Attorney's Docket: <u>2003FR302</u>

Serial No.: N/A

Art Unit N/A

Preliminary Amendment prior to Examination

18.(Currently Amended) <u>A process</u> [[Process]] for the preparation of a 2-(n-alkyl)3-carboxybenzofuran of formula (II), characterized in that a 3-(1hydroxyalkylidene)-3H-benzofuran-2-one of formula (VI):

or its 3-alkanoyl-3H-benzofuran-2-one ketonic tautomeric form of formula (VII):

in which R4 and R'₁ R4 represents a linear or branched alkyl radical including from 2 to 5 carbon atoms and R'₁ represents a nitro radical have the meanings already indicated in Claim 16, is treated by heating and by

an acid catalyst in concentrated aqueous solution [[at]] of at least 80% by weight and then [[in that]] the expected product of formula (II)

is isolated.

Attorney's Docket: <u>2003FR302</u>

Serial No.: N/A

Art Unit N/A
Preliminary Amendment prior to Examination

- 19.(Original) Process according to Claim 18, characterized in that the treatment by heating of the compound of formula (VI) or of formula (VII) is carried out in a carboxylic acid.
- 20.(Currently Amended) The process of claim 18, wherein Process according to either of Claims 18 and 19, characterized in that the acid catalyst in concentrated aqueous solution is concentrated sulphuric acid at between 80% and 95% by weight.
- The process of claim 1, wherein the Lewis acid in the 21.(New) reaction of the compound of formula (III) and the alkyl phenyl ether is aluminum chloride.
- 22.(New) The process of claim 13, wherein the Lewis acid is aluminum chloride.